33. (New) The method of claim 31, wherein said cognitive disorder is dementia.

A4 cont.

34. (New) The method of claim 31, wherein said cognitive disorder is Alzheimer's disease.

35. (New) 4-[2-(3-fluoro-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridin-3-yl]-benzenesulfonamide.

Remarks

Currently Claims 1-10, 13-14 and 17-35 are pending. Claims 11-12 and 15-16 have been canceled to conform to standard US practice. Claims 1-10 and 13-14 have been amended to conform the claims to standard US form, including the removal of multiple dependencies and standard Markush claim format. Claims 17-35 have been added to complete the record. Support for these claims can be found in Applicants' original specification and claims. More particularly support for claim 17 can be found in original claim 4. Support for new claims 18-23 can be found in original claim 9. Support for new claims 24-25 can be found in original claims 13 and 14, respectively. Support for new claims 26-34 can be found in the specification at pages 7-8. Support for new claim 35 can be found in original claim 6. No new matter is added.

The specification has been amended to cross-reference related applications.

An abstract on a separate page is also provided.

Applicants respectfully submit that the instant application is in condition for substantive examination, which action is respectfully requested. The Examiner is invited to contact the undersigned at 483-8222, to discuss this case further if desired.

Respectfully submitted,

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Date: 27 April, 2001

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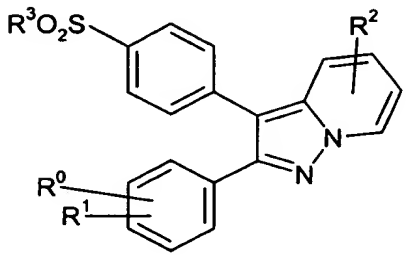
Marked-up Claims

1. (Amended) Compounds of formula (I)



(I)

and pharmaceutically acceptable derivatives thereof [in which:] wherein

R^0 and R^1 are independently selected from the group consisting of H, halogen, C_{1-6}alkyl, C_{1-6}alkoxy, [or] and C_{1-6}alkoxy substituted by one or more fluorine atoms;

R^2 is selected from the group consisting of H, C_{1-6}alkyl, C_{1-6}alkyl substituted by one or more fluorine atoms, C_{1-6}alkoxy, C_{1-6}hydroxyalkyl, SC_{1-6}alkyl, C(O)H, $C(O)C_{1-6}$alkyl, C_{1-6}alkylsulphonyl, and C_{1-6}alkoxy substituted by one or more fluorine atoms; and

R^3 is C_{1-6}alkyl or NH_2.

2. (Amended) Compounds as claimed in claim 1 wherein R^0 and R^1 are independently selected from the group consisting of H, halogen, C_{1-6}alkyl, [or] and C_{1-6}alkoxy; R^2 is C_{1-3}alkyl substituted by one or more fluorine atoms; and R^3 is C_{1-3}alkyl or NH_2.

3. (Amended) Compounds as claimed in claim 1 [or 2] wherein R^0 and R^1 are independently selected from the group consisting of H, F, Cl, C_{1-3}alkyl [(e.g. methyl), or], and C_{1-3}alkoxy [(e.g. ethoxy)]; R^2 is C_{1-3}alkyl substituted by one or more fluorine atoms [(e.g. trifluoromethyl)]; and R^3 is methyl or NH_2.

4. (Amended) Compounds as claimed in [any one of claims 1 to 3] claim 1 wherein R^0 is selected from the group consisting of F, Cl, [or] C_{1-3}alkyl [(e.g. methyl)

or] and C_{1-3}alkoxy [(e.g. ethoxy)]; R^1 is H; R^2 is C_{1-3}alkyl substituted by one or more fluorine atoms [(e.g. trifluoromethyl)]; and R^3 is methyl or NH_2.

5. (Amended) Compounds as claimed in [any one of claims 1 to 4] claim 1 wherein R^0 is at the 3- or 4- position of the phenyl ring; and R^2 is at the 6- position of the pyridine ring.

In the following claim, brackets do not indicate subject matter deleted. Interliniation will be employed to denote subject matter deleted from the claims to avoid confusion with respect to the brackets contained in compound names.

6. (Amended) A compound selected from the group consisting of:

4-[2-(3-fluoro-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridin-3-yl]-benzenesulfonamide;

2-(3-fluoro-phenyl)-3-(4-methanesulfonyl-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridine;

4-[2-(4-ethoxy-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridin-3-yl]-benzenesulfonamide;

4-[2-(4-fluoro-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridin-3-yl]-benzenesulfonamide;

2-(4-fluoro-phenyl)-3-(4-methanesulfonyl-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridine;

4-(2-phenyl-6-trifluoromethyl-pyrazolo[1,5-a]pyridin-3-yl)-benzenesulfonamide;

3-(4-methanesulfonyl-phenyl)-2-phenyl-6-trifluoromethyl-pyrazolo[1,5-a]pyridine;

4-[2-(4-methyl-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridin-3-yl]-benzenesulfonamide;

and pharmaceutically acceptable derivatives thereof.

Marked-up Claims

In the following claim, brackets do not indicate subject matter deleted. Interliniation will be employed to denote subject matter deleted from the claims to avoid confusion with respect to the brackets contained in compound names.

7. (Amended) A compound selected from the group consisting of:

N-acetyl-4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

N-acetyl-4-[2-(4-ethoxyphenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

N-acetyl-4-[2-phenyl-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

sodium salt of N-acetyl-4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]-N-(2-methoxyacetyl)benzenesulfonamide;

4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]-N-propionylbenzenesulfonamide;

4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]-N-isobutyrylbenzenesulfonamide;

N-benzoyl-4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

methyl 4-[({4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]phenyl}sulfonyl)amino]-4-oxobutanoate;

4-[({4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]phenyl}sulfonyl)amino]-4-oxobutanoic acid;

4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]-N-pentanoylbenzenesulfonamide;

2-[({4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]phenyl}sulfonyl)amino]-2-oxoethyl acetate;

N-acetyl-4-[2-(4-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

N-(2-chloroacetyl)-4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

A

N-[2-(diethylamino)acetyl]-4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

methyl {4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]phenyl}sulfonylcarbamate; and

tert-butyl {4-[2-(3-fluorophenyl)-6-(trifluoromethyl)pyrazolo[1,5-a]pyridin-3-yl]phenyl}sulfonylcarbamate.

In the following claim, brackets do not indicate subject matter deleted. Interliniation will be employed to denote subject matter deleted from the claims to avoid confusion with respect to the brackets contained in compound names.

8. (Amended) A compound selected from the group consisting of:

4-[6-chloro-2-(3-ethoxyphenyl)pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

6-chloro-2-(3-ethoxyphenyl)-3-[4-(methylsulfonyl)phenyl]pyrazolo[1,5-a]pyridine;

4-[6-methyl-2-phenyl-pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

4-[2-(3-fluorophenyl)-6-methyl-pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

4-[2-(3-ethoxyphenyl)-6-methyl-pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

4-[2-(4-ethoxyphenyl)-6-methyl-pyrazolo[1,5-a]pyridin-3-yl]benzenesulfonamide;

6-methyl-2-phenyl -3-[4-(methylsulfonyl)phenyl]pyrazolo[1,5-a]pyridine;

2-(3-fluorophenyl)-6-methyl-3-[4-(methylsulfonyl)phenyl]pyrazolo[1,5-a]pyridine;

2-(3-ethoxyphenyl)-6-methyl-3-[4-(methylsulfonyl)phenyl]pyrazolo[1,5-a]pyridine;

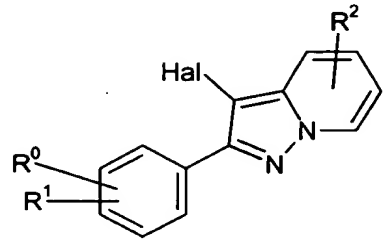
2-(4-ethoxyphenyl)-6-methyl-3-[4-(methylsulfonyl)phenyl]pyrazolo[1,5-a]pyridine;

and pharmaceutically acceptable derivatives thereof.

9. (Amended) A process for the preparation of compounds of formula (I) and pharmaceutically acceptable derivatives thereof as claimed in claim 1, said process comprising the steps of: [defined in any one of claims 1 to 8, which comprises:]

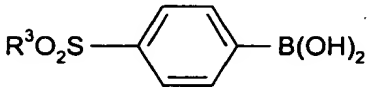
Marked-up Claims

(A) reacting a compound of formula (II)



(II)

or a protected derivative thereof, with a compound of formula (III)

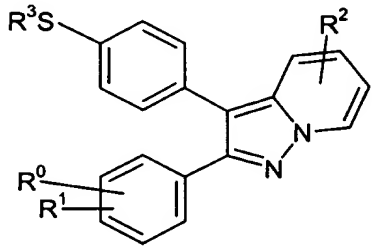


(III)

or a protected derivative thereof to prepare a compound of formula (I); and[;

or

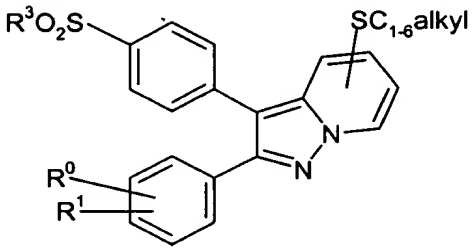
(B) where R^3 represents C_{1-4}alkyl, reacting a compound of formula (IV)



(IV)

or a protected derivative thereof with an oxidising agent; or

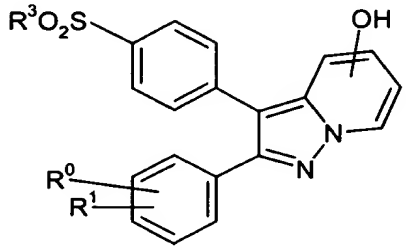
(C) where R^2 is C_{1-6}alkylsulphonyl, oxidising a compound of formula (V)



(V)

or a protected derivative; or

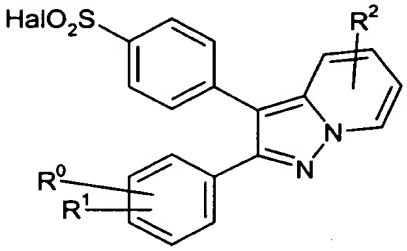
(D) where R^2 is C_{1-6}alkoxy substituted by one or more fluorine atoms, reacting a alcohol of formula (VI)



(VI)

or a protected derivative thereof with a halofluoroalkane; or

(E) where R^3 is NH_2, reacting a compound of formula (X)



(X)

with a source of ammonia under conventional conditions; or

(F) interconversion of a compound of formula (I) into another compound of formula (I); or

(G) deprotecting a protected derivative of compound of formula (I);

and] (B) optionally converting the compound [compounds] of formula (I) [prepared by any one of processes (A) to (G) into] to a pharmaceutically acceptable [derivatives] derivative thereof.

10. (Amended) A pharmaceutical composition comprising a compound of formula (I) or a pharmaceutically acceptable derivative thereof as [defined in any one of claims 1 to 8] claimed in claim 1 in admixture with one or more physiologically acceptable carriers or excipients.

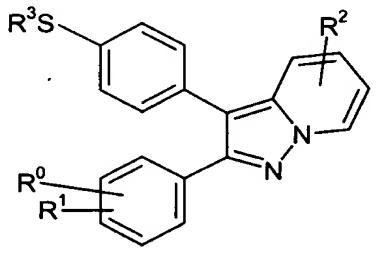
13. (Amended) A method of treating [a human or] an animal subject suffering from a condition which is mediated by selective inhibition of COX-2 which comprises administering to said subject an effective amount of a compound of formula (I) or a pharmaceutically acceptable derivative as [defined in any one of claims 1 to 8] claimed in claim 1.

14. (Amended) A method of treating [a human or] an animal subject suffering from an inflammatory disorder, which method comprises administering to said subject an effective amount of a compound of formula (I) or a pharmaceutically acceptable derivative thereof as [defined in any one of claims 1 to 8] claimed in claim 1.

17. (New) The compound according to claim 1, wherein R^0 is selected from the group consisting of F, Cl, methyl and ethoxy; R^1 is H; R^2 is trifluoromethyl; and R^3 is methyl or NH_2.

18. (New) A process for the preparation of compounds of formula (I) and pharmaceutically acceptable derivatives thereof as claimed in claim 1, said process comprising the steps of:

(A) where R^3 represents C_{1-4}alkyl, reacting a compound of formula (IV)



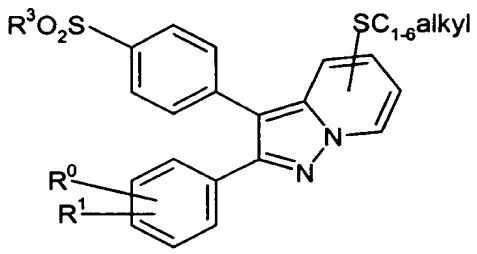
(IV)

or a protected derivative thereof with an oxidising agent to prepare a compound of formula (I); and

(B) optionally converting the compound of formula (I) to a pharmaceutically acceptable derivative thereof.

19. (New) A process for the preparation of compounds of formula (I) and pharmaceutically acceptable derivatives thereof as claimed in claim 1, said process comprising the steps of:

(A) where R^2 is C_{1-6}alkylsulphonyl, oxidising a compound of formula (V)



(V)

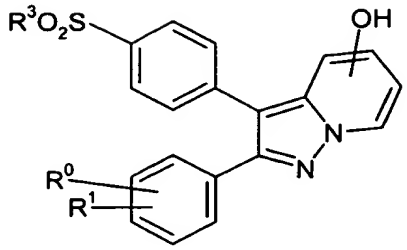
or a protected derivative thereof to prepare a compound of formula (I); and

(B) optionally converting the compound of formula (I) to a pharmaceutically acceptable derivative thereof.

20. (New) A process for the preparation of compounds of formula (I) and pharmaceutically acceptable derivatives thereof as claimed in claim 1, said process comprising the steps of:

(A) where R^2 is C_{1-6}alkoxy substituted by one or more fluorine atoms, reacting a alcohol of formula (VI)

Marked-up Claims



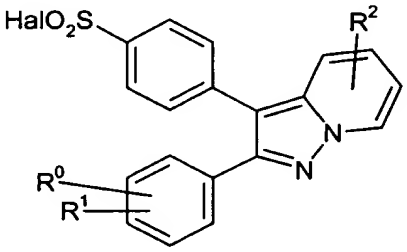
(VI)

or a protected derivative thereof with a halofluoroalkane to prepare a compound of formula (I); and

(B) optionally converting the compound of formula (I) to a pharmaceutically acceptable derivative thereof.

21. (New) A process for the preparation of compounds of formula (I) and pharmaceutically acceptable derivatives thereof as claimed in claim 1, said process comprising the steps of:

(A) where R^3 is NH_2, reacting a compound of formula (X)



(X)

with a source of ammonia under conventional conditions to prepare a compound of formula (I); and

(B) optionally converting the compound of formula (I) to a pharmaceutically acceptable derivative thereof.

22. (New) A process for the preparation of compounds of formula (I) and pharmaceutically acceptable derivatives thereof as claimed in claim 1, said process comprising the steps of:

(A) interconverting a compound of formula (I) into another compound of formula (I); and

(B) optionally converting the compound of formula (I) to a pharmaceutically acceptable derivative thereof.

23. (New) A process for the preparation of compounds of formula (I) and pharmaceutically acceptable derivatives thereof as claimed in claim 1, said process comprising the steps of:

(A) deprotecting a protected derivative of compound of formula (I); and

(B) optionally converting the compound of formula (I) to a pharmaceutically acceptable derivative thereof.

24. (New) A method for the prophylaxis or treatment of a human subject suffering from a condition which is mediated by selective inhibition of COX-2 which comprises administering to said subject an effective amount of a compound of formula (I) or a pharmaceutically acceptable derivative thereof as claimed in claim 1.

25. (New) A method for the prophylaxis or treatment of a human subject suffering from an inflammatory disorder, which method comprises administering to said subject an effective amount of a compound of formula (I) or a pharmaceutically acceptable derivative thereof as claimed in claim 1.

Marked-up Claims

26. (New) A method for the prophylaxis or treatment of conditions and diseases selected from the group consisting of pain, fever and inflammation mediated by selective inhibition of COX-2, said method comprising administering an effective amount of a compound of formula (I) or a pharmaceutically acceptable derivative thereof as claimed in claim 1.

27. (New) The method according to claim 26, wherein said conditions and diseases are selected from the group consisting of rheumatic fever, symptoms associated with influenza or other viral infections, lower back pain, neck pain, headache, toothache, sprains, strains, myositis, neuropathic pain, synovitis, arthritis, rheumatoid arthritis, degenerative joint diseases, osteoarthritis, gout, ankylosing spondylitis, tendinitis, bursitis, psoriasis, eczema, burns, dermatitis, sports injuries, injuries arising from surgical procedures and injuries arising from dental procedures.

28. (New) A method for the prophylaxis and treatment of pain, said method comprising administering an effective amount of a compound of formula (I) as claimed in claim 1.

29. (New) A method for the prophylaxis and treatment of arthritis, said method comprising administering an effective amount of a compound of formula (I) as claimed in claim 1.

30. (New) A method for the prophylaxis and treatment of conditions involving inflammatory processes, said method comprising administering an effective amount of a compound of formula (I) as claimed in claim 1, wherein said conditions involving inflammatory processes are selected from the group consisting of asthma, allergic rhinitis, respiratory distress syndrome, inflammatory bowel disease, Crohn's disease, gastritis, irritable bowel syndrome, ulcerative colitis, vascular disease, migrain

periarteritis nodosa, thyroiditis, aplastic anemia, Hodgkin's disease, sclerodoma, type I diabetes, myasthenia gravis, multiple sclerosis, sorcoidosis, nephrotic syndrome, Bechet's syndrome, polymyositis, gingivitis, conjunctivitis and myocardial ischemia.

31. (New) A method for the prophylaxis or treatment of cognitive disorders, said method comprising administering an effective amount of a compound of formula (I) as claimed in claim 1.

32. (New) The method of claim 31 wherein said cognitive disorders are selected from the group consisting of degenerative dementia, senile dementia, Alzheimer's disease, Pick's disease, Huntington's chorea, Parkinson's disease, Creutzfeldt-Jakob disease, vascular dementia, multi-infarct dementia, dementia associated with intracranial space occupying lesions, trauma, infections, metabolism, toxins, anoxia, and vitamin deficiency; and mild cognitive impairment associated with aging.

33. (New) The method of claim 31, wherein said cognitive disorder is dementia.

34. (New) The method of claim 31, wherein said cognitive disorder is Alzheimer's disease.

35. (New) 4-[2-(3-fluoro-phenyl)-6-trifluoromethyl-pyrazolo[1,5-a]pyridin-3-yl]-benzenesulfonamide.